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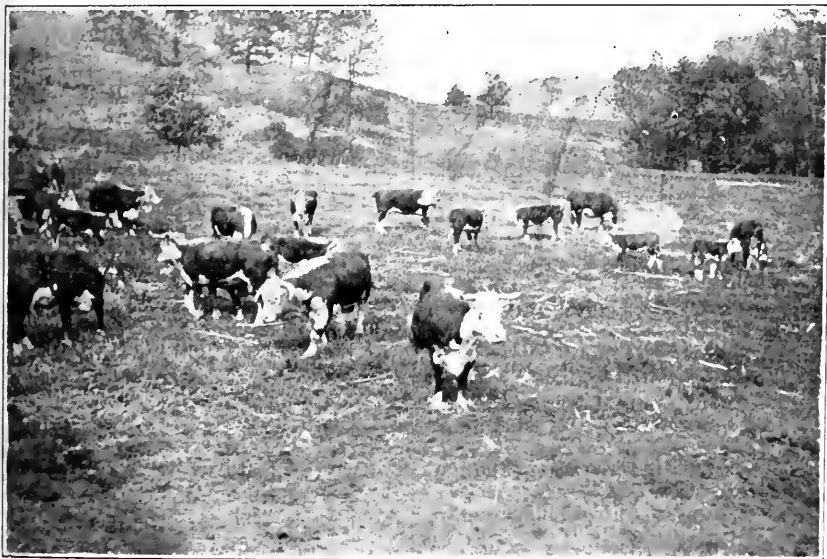
College of Agriculture, West Virginia University

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Morgantown

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## *Adjusting Agricultural Production and Distribution in the Clarksburg Area to Meet Home Market Demands*



An Important Agricultural Enterprise in the Clarksburg Area

By

W. W. ARMENTROUT

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# ***Adjusting Agricultural Production and Distribution in the Clarksburg Area to Meet Home Market Demands***

This report is the second in a series of studies of consumption of farm products in the larger cities of West Virginia, and of production of such products in the agricultural sections adjacent to these cities. The first study of the series was of Charleston and its trade area, the report of which was published as West Virginia Agricultural Experiment Station Bulletin No. 188.

This bulletin, the second of the series, is the report of a study of food consumption in Clarksburg and its trade area and of farm production in Harrison County. The study was made in the summer of 1925. In its more important features, this study is comparable with the one of Charleston.

The Federal Bureau of Agricultural Economics cooperated in the first study, furnishing two members of its staff to assist in the work; this one was made entirely by staff members of the West Virginia Agricultural Experiment Station and Extension Division.

## **Purpose of the Study**

Agriculture is continually facing periods of readjustment as population increases and industry grows. During the past ten years a need for readjustment in agriculture in some sections of the state has been felt keenly by farmers and agricultural leaders in West Virginia. The need for such adjustment has been intensified in Harrison and neighboring counties because of the general agricultural situation following the World War, because of the increase of population of cities in this part of West Virginia, because of the great increase in mileage of improved roads in this section, and because of the farmers' increasing need for money.

Economic adjustments will eventually work themselves out but, with an understanding of the forces at work as a basis of guiding adjustments, much loss of time, effort, and often wealth may be avoided. This study is an attempt to find out some of the economic facts about agriculture in the Clarksburg section and to interpret them with a view to bringing about readjustments with a minimum

loss to the agricultural and industrial interests of this section.

### **A Background for the Agricultural Situation in the Clarksburg Area**

The early years of farming in Harrison County, as well as in the state and nation generally, formed a period of self-sufficing agriculture; that is, each farm produced what its farm family consumed, and consumed for the most part what it produced.

The farmer was not concerned with a market because he did not need to buy and had little to sell. His motive in farming was to produce food and clothing materials for his family. He was, therefore, guided in his production by the needs of his family, and to some extent by climatic and soil conditions. His welfare depended entirely upon the quantity of production on his own farm. He was not especially interested in articles for sale because he had only a limited need for money.

But along with industrial development has come a great need for money as a medium of exchange, and this has forced farming to become more or less of a commercial enterprise. To get the most money from farming means the economic production of those commodities which will sell for the most money. After due consideration of economic production the market demand is the chief guide as to what commodity and the quantity of it to produce.

Throughout the country agriculture is coming more and more to look to consumer demand as its guide for production, although it is surprising how little removed from the self-sufficing guide agriculture is in Harrison and similar industrial counties in West Virginia. There is, however, a very definite reason for this.

While agriculture in this section was in the beginning stages of transition from the self-sufficing to the commercial type, there came a great and rapid development of the coal, oil, and gas industries. Options amounting to from one to several dollars per acre were taken on much of the farm land in several counties. Royalties from oil and gas were received by many farmers, and the outright sale of coal lands gave others additional money. All in all, numbers of farmers found themselves with more money than they had ever had before. At that time, the need for money was, as compared with the present, not great. The farmer still produced a major portion of the commodities which his family de-



nanded; taxes were not especially burdensome; there was little travel and hence little money outlay for transportation.

The money which the farmer received from mineral rights carried him through a period during which agriculture in other sections was becoming commercialized. During this period he came to utilize his land in a way most pleasing to himself without regard to the greatest money returns that were possible.

Within recent years, however, a different situation has arisen which calls for a readjustment in production. This situation has come from the increased needs of the farmers for money, accompanied by a decreasing return to them from mineral rights and a progressive exhaustion of money received from the sale of coal and timber. The farmers still produce much of their own food, but the demands for money have increased enormously because taxes have increased; modern transportation calls for additional money; and the farmers produce less and less of the things which modern life demands. With the advent of good roads much trade from the country and village store has gone to the city. In the village, produce could be exchanged for other desired commodities, but in the city, for the most part, it must be sold at one place and the commodities bought at another place. Barter has practically passed from the farmers' method of exchange. His need is for money and this brings him face to face with market demands. In order to get money for a commodity it must be something which people want, and the greater the desire for the commodity the more money the consumer will pay for it.

This study, then, was to ascertain the demands of the Clarksburg markets for certain commodities to use as a guide for production in Harrison and nearby counties. Resources at hand did not permit an exhaustive analysis of the economy of production of all the commodities considered in the market. In this report no pretense is made of giving the last word in the economy of production of any commodity considered.

As a general rule as population increases in a given locality, farming gradually changes to a more intensive type. But very often the cost of farm labor, due to high industrial wages in the territory, out of proportion to the value of the land and agriculture remains more or less extensive. The high farm labor cost in the Clarksburg area is a very important factor in determining the type of farming

and should be reckoned with, even though other conditions are favorable for intensive farming.

The consuming population has been on the increase in Harrison County for a number of years with a resulting greater demand for food products.

## POPULATION OF CLARKSBURG AND HARRISON COUNTY

The population of Clarksburg, according to the federal census was 27,869 in 1920 and in 1910 it was 9,210. The population increase in the ten year period was 18,659 but this is by no means all true increase. The corporate limits of the city were extended between 1910 and 1920 to take in two important suburbs. The increase in population is better shown by statistics for Harrison County in which Clarksburg is located. The population of the county was 27,690 in 1900; 48,381 in 1910; and 74,793 in 1920. Thus it may be seen that there has been a constant and quite rapid increase in population in the county during the past twenty years. Nearly half, or 41.2 per cent, of the population of the county was enumerated as urban in 1920. In reality the urban population made up a much larger percentage of the total than indicated, because the inhabitants of many mining villages were enumerated as rural, when, in fact very few of them were in any way connected with agricultural production. From the standpoint of production and consumption of farm products they are in the same position as urban dwellers.

The density of population for Harrison County in 1920 was 179.8 persons per square mile, while for the state as a whole it was 60.9 and for the United States it was 35.5. It is apparent then that in comparison with average conditions of population density, Harrison county has reached the point where intensive rather than extensive farming might well be practiced by many of its farmers. The same might well be said for adjacent territory.

If five persons constitute a family, there were approximately 15,000 families in the county. From census data it is estimated that the average farm in the United States will provide agricultural commodities sufficient for four families. There were 2,271 farms in Harrison County, and if they produced as much as the average farm for the United States, they would not feed more than about

half of the population of the county. The average farm in Harrison County, however, is not so large in either acreage or production as the average farm for the United States and as may be seen later in this report, the farms of the county actually supply much less than half of the food consumed in the area.

### CLARKSBURG TRADE AREA

In the Charleston study, it was possible to define the trade territory more or less accurately; but for Clarksburg there is so much overlapping of trade territory with Parkersburg, Fairmont, Grafton, and Weston that it seemed unwise, in a study of this scope, to attempt to outline a trade territory. But no matter where the commodities are consumed, as long as they are distributed from Clarksburg, the quantity so distributed may be considered as the demand of this market.

The part of this study dealing with agricultural production was confined to Harrison County farms, but the data should be of value as a guide to production in neighboring counties, which normally use Clarksburg as a market.

### AGRICULTURE IN HARRISON COUNTY

The following data for Harrison County have been adapted from the 1920 Census of the United States and are placed here for convenient reference.

Land area, 266,240 acres.

Land in farms, 232,981 acres.

Per cent of land area in farms, 87.5.

Per cent of farm land improved, 86.3.

Number of farms, 2,271.

Average acreage per farm, 102.06 acres.

Average acreage of improved land per farm, 88.5 acres.

Value of all crops, \$2,292,904.

Value of livestock, \$1,830,941.

Value of livestock products, \$849,749.

Cereals, 14,450 acres.

Hay and forage, 26,214 acres.

Vegetables, 640 acres.

Miscellaneous crops, 5 acres.

Small fruits, 98 acres.

Number of fruit trees, bearing, 175,925; not bearing, 63,902.

A total of 41,407 acres in Harrison County was devoted to cultivated crops and hay. This is only 17.9 per cent of the land in farms in the county. It is thus apparent from census data as well as from observation that there is comparatively little of the land under cultivation. Much of the land is rugged, a considerable acreage, however, is gently rolling. It is difficult for one, unfamiliar with each individual farm, to estimate how much the crop land could be increased or whether it would be advisable to increase it at all. Each individual farmer must decide for himself what land he will crop and what crops he will grow. The purpose of this study is not to attempt to find data that would lead one to say that farmers generally should devote a certain acreage to a certain crop; but it is merely to present to the farmers the market demands.

The large area of bluegrass pasture is the basis of the livestock industry in the county. Fat cattle and lambs are sold off pasture in the summer and fall; grain fattening is not a common practice.

Dairy farming appears to be on the increase and there are a few farmers who devote their major efforts to truck and market gardening. Poultry and egg production have also become quite important sources of income.

## RAILWAYS AND HIGHWAYS

Clarksburg is located on the main line of the Baltimore and Ohio Railroad. Branch lines of this railroad radiate in all directions. The West Virginia Short Line operates to Wheeling and points west; the West Virginia and Pittsburg branch to Richwood, Charleston, and points south; and the Monongahela Railroad branch gives direct connections to Pittsburgh and the north and west. The Monongahela West Penn Public Service Company also operates a passenger and package freight service over sixty-five miles of interurban lines, serving Fairmont, Weston, and intermediate points, with its principal terminal at Clarksburg. Farmers do not, however, make much use of freight facilities offered by this traction line in the marketing of their products.

The county has a fairly adequate system of highways. Improved roads extend in all directions from Clarksburg and traverse the better agricultural sections. No farmer has a great distance to travel before reaching a hard surfaced road. There are gaps and cross roads which need to be constructed or improved before good roads

are available to all farmers, but this county has made more progress than the average county of the state with its highways. The problem of getting to market is a comparatively easy one for most Harrison County farmers.

### NEARNESS TO MARKET GIVES HARRISON COUNTY FARMERS AN ADVANTAGE

Transportation costs are a very considerable item in the price of food commodities. Distance from market determines transportation costs, and in general such costs increase with the distance over which commodities must be transported but not in proportion to this distance. Harrison County farmers and the farmers of nearby counties have a home market for practically all their produce. They necessarily have some transportation costs, but they are not nearly so high as those of competing sections farther away from Clarksburg.

The total freight bill for the year of this study (June 1, 1924 to May 31, 1925) on commodities included in this study was approximately \$383,000. Practically all of this could be saved to the farmers if they could grow the products at home. It is necessary that the competitors haul the commodities to the railroad and load them on the cars and one may reasonably assume that it costs them somewhere near as much to do this as it would cost a Harrison County farmer to transport his product to Clarksburg.

This bill for transportation does not include money paid out for express and parcel-post, which amounts to a considerable sum. It was not possible to get express charges because express waybills are sent daily to Baltimore and there were no facilities available to collect this data. Neither was it possible to get charges on the parcels post receipts. If these could have been added the total transportation charges would have shown considerable increases.

Too often it is assumed that the whole of such a transportation bill could be saved to local farmers. Only a part of it can be saved economically for them, however, because there are certain seasons of the year when the added cost of producing each of these commodities would be far more than the saving in transportation, and quite often other sections of the country can grow and deliver a commodity in Clarksburg at less cost than the nearby farmer. So the nearness

to market is an advantage that may be offset by other disadvantages. Before producing any crop, the farmer should figure carefully whether it will increase his net returns from farming, rather than whether he can produce it as cheaply as it can be produced in some other section.

## **FREIGHT RECEIPTS OF SPECIFIED COMMODITIES AND THE PRODUCTION OF THESE COMMODITIES IN HARRISON COUNTY**

The commodities included in this study were potatoes, cabbage, onions, lettuce, tomatoes, beans, corn, melons, miscellaneous vegetables, apples, eggs, meats, milk, hay, mixed feeds, flour, corn, and oats.

Each of the above commodities was being produced or may be produced in Harrison County or in other counties situated conveniently to the Clarksburg market. Market demand is judged by the quantity of the receipts, and while the quantity consumed will vary somewhat from year to year according to supply as reflected in price yet the market demand, as long as the population does not decrease will remain about the same. With an increasing population, however there should be an increasing demand for food stuffs, so the demands will not likely fall below the quantity here shown.

The freight receipts are a summary from actual freight records for a twelve months period beginning June 1, 1924, and ending May 31, 1925. Both carlot and less-than-car-lot receipts were included. The bulk of the food commodities was transported by freight, but smaller quantities also came into Clarksburg by express and parcel post. It was impossible to get actual records of receipts of the above mentioned commodities from Clarksburg express and post office therefore such receipts are not considered.

Estimates of the quantities of the various commodities sold from the farms of Harrison County are based on a canvass of 241 farms comprising 15 per cent of the farm land of the county. The records of the commodities shipped out of the county were taken from freight records and in the case of express, on estimates of the agents, of the various express offices of the county.

### Potatoes

The records showed the receipt of 10,187,934 pounds or 169,799 bushels of potatoes by freight during the twelve months period included in the study. The potatoes were received by wholesalers, retailers, and some few, for the most part locally grown, were billed direct to the consumer. Of the total quantity referred to above, only 833,348 pounds or 13,000 bushels were grown in West Virginia. Thus West Virginia supplied but 8 per cent of the potatoes which were received by freight in the Clarksburg market.



Potato Production Is Increasing in the Clarksburg Area.

From the records secured from 15 per cent of the farm acreage of Harrison County, it is estimated that 19,000 bushels of potatoes were sold from the farms of Harrison County. Not all of these were sold in Clarksburg, however. Many of them went to smaller towns and mining villages in the county. But if one supposes that all of these were sold on the Clarksburg market, even then West Virginia would have supplied only 17 per cent of the potatoes which reached the Clarksburg market. This estimate, however, does not take into account any potatoes which might have been received by freight in the smaller towns of the county but which did not pass through Clarksburg wholesale houses.

The chief thing of interest in this connection is that, at most,

less than one-fifth of the potatoes marketed in Clarksburg were grown in West Virginia. It would appear that there is an opportunity to increase production about five times before outside markets would need to be sought. In order to supply the market the year-round it would be necessary to provide storage but because of limited supply it is doubtful whether storage would be profitable for the individual grower. The bulk of West Virginia potatoes is marketed directly after they are harvested and thus all storage costs are eliminated. In a normal season they come on the market as the southern crop is about exhausted and before the western and northern crop arrive in large quantities. A monthly summary of potato receipts showing the state in which the shipment originated, the quantity in pounds and the freight charges will give a better idea of the extent to which production may be expanded.





TABLE 1.—Continued.

State From which Shipped	1925									
	January		February		March		April		May	
	Pounds	Freight Charges	Pounds	Freight Charges	Pounds	Freight Charges	Pounds	Freight Charges	Pounds	Freight Charges
South Carolina -----									70,300	\$ 376
Georgia -----									31,820	\$ 180
Michigan -----	159,200	\$ 654	78,000	\$ 326			78,000	\$ 335		
Wisconsin -----			72,000	\$ 371	182,840	\$ 831	36,000	\$ 94		
Maryland -----					206	\$ 1			370	\$ 1
West Virginia -----			222	\$ 1	38,960	\$ 117	4,119	\$ 11		
Ohio -----			360	\$ 1						
New York -----	404,386	\$ 1,222	463,890	\$ 1,338	591,710	\$ 1,803	878,140	\$ 2,675	617,208	\$ 1,933
Minnesota -----			75,000	\$ 419	108,000	\$ 652	72,000	\$ 370		
Cincinnati* -----					36,000	\$ 79	150	\$ 1		
Pittsburgh* -----					320	\$ 1	44,500	\$ 133		
Total -----	563,586	\$ 1,876	662,472	\$ 2,456	958,036	\$ 3,484	1,112,989	\$ 3,619	719,698	\$ 2,490

\*Rebilled from wholesale market.

**TABLE 2.—Receipts of Potatoes In Clarksburg by States, Ranked According to Quantity, June 1924 to May 1925, Inclusive.**

State	Pounds Received
New York -----	3,729,020
Virginia -----	1,780,846
Minnesota -----	1,359,000
West Virginia -----	833,348
South Carolina -----	458,230
Michigan -----	444,200
Wisconsin -----	420,740
New Jersey -----	341,713
Maryland -----	298,145
Georgia -----	285,945
Pennsylvania -----	86,615
Maine -----	83,050
Ohio -----	37,002
Kentucky -----	30,000

There were three other states which supplied more potatoes to this market than did West Virginia. The rank of the states will change from year to year according to the yield and price, but West Virginia probably has never ranked higher than at this time.

From Table 1 it may be seen that the bulk of the West Virginia potato crop went on the market in August, September, October, and November, with October and August being the leading months. There were a few bushels which went on the market in each of ten months while there were none in two months, January and May. The deliveries, except in the four months of heavy delivery, were for the most part in small quantities, usually in less-than-car-lots, and quite often they were billed direct to the consumer.

For the present the production program may well be based on the demands of the four months period over which West Virginia farmers market their potatoes. This will require no changing to earlier varieties or storage.

During August, September, October, and November, the West Virginia market period, 3,833,359 pounds of potatoes were received in Clarksburg. West Virginia supplied 763,133 pounds or approximately 20 per cent of these. This would indicate, taking production conditions as they are, that the production might be increased five fold before there would be an over-supply of the market. In any case local production must meet out-of-state competition during these months and this competition would not be much stronger if nearly

enough potatoes were produced locally to supply the market demands.

There might be some advantage in growing potatoes which would come on the market earlier but it would seem unwise to recommend storage as a general practice, when so many more potatoes than are now being grown can be marketed without storage.

A further analysis of each of the four months included above should be of value in planning the time to put the crop on the market.

During August 468,695 pounds of potatoes were received on the market, of which quantity West Virginia supplied 180,200 or 38 per cent. The production for local marketing during this month could not stand an increase of more than two and one-half fold. The competing states are Virginia and Maryland. This is getting near the end of Virginia's Eastern Shore product and it is claimed by some Clarksburg merchants that West Virginia potatoes are of higher quality at this time, than the Eastern Shore product.

The receipts for September totaled 773,358 pounds, of which West Virginia supplied 90,830 pounds or 11 per cent. There is an opportunity to increase production for local marketing nine fold during this month. The competing states were Virginia, New Jersey, Michigan, and Ohio.

For October the receipts were 1,719,026 pounds of which West Virginia supplied 425,090 pounds, or nearly 25 per cent. This indicates a chance for a four fold increase for the local market. October was the month of heaviest delivery of the West Virginia crop. The strongest competitor during this month was Minnesota, which supplied more than twice as many potatoes as came on the Clarksburg market from West Virginia. The average freight charge on the Minnesota potatoes was 56 cents per hundred pounds, while the average charge on the West Virginia product was 25 cents per hundred pounds. West Virginia has an advantage in location over its strongest competitor, Minnesota, amounting to 31 cents per hundred pounds.

For November the total receipts were 872,280 pounds. West Virginia supplied 7 per cent of this total. The West Virginia potatoes were marketed during the first part of the month and were really a part of the heavy delivery of October. The largest competitor during this month was New York, which supplied more than

eight times as many potatoes as were marketed from West Virginia.

The average freight charge for all potatoes from West Virginia during this four months period of heavy local delivery including both those marketed in car-lots and those marketed in less-than-car-lots was 24 cents per hundred pounds. The freight charges for all other potatoes arriving on the Clarksburg market averaged 46 cents per hundred pounds. This gives an advantage of 22 cents per hundred pounds for West Virginia potatoes over the average for all competitors because of nearness to market.

The average freight charge for all potatoes received from West Virginia over the twelve months period studied was 24.5 cents per hundred pounds, while for all other potatoes it was 42 cents. On the basis then of yearly receipts West Virginia has an advantage of 17.5 cents per hundred pounds because of location.

From the standpoint of demand there is clearly an opportunity for increasing local potato production. It is then a question for each individual farmer to decide whether he can successfully compete in potato production. The following cost of production data are the most accurate available and may serve as a guide.

Studies of cost of production of potatoes in two sections of West Virginia were made in 1914 and 1920. The following quotation is taken from West Virginia Agricultural Experiment Station Bulletin 187, which is a report of these studies:

"In 1922 in Brooke County potatoes yielded 90.4 bushels per acre and were worth \$113.00. The cost of production was \$82.24 per acre leaving a net return of \$30.76 per acre or \$2.63 per man day. In Preston County in 1922 the yield of potatoes was 162.7 bushels valued at \$144.80. The cost of production was \$77.84, leaving a net return per acre of \$66.96 or \$5.78 per man day. Several sections of West Virginia are very well adapted to the production of potatoes. Lack of satisfactory method of marketing the crop has been the chief reason for not growing more potatoes."

In comparison with the foregoing costs of production of potatoes in West Virginia the following data on cost of potato production are adapted from Table 14 of Department Circular 340 of the United States Department of Agriculture in which is presented the cost of producing certain field crops in 1923.

## Cost of Producing Potatoes in 1923.

Geographical Division	Yield per Acre (Bushels)	Net Cost per Acre	Net Cost per Bushel	Value per Acre	Value per Bushel
Northeastern -----	170	\$ 105.50	\$ 0.62	\$ 172.34	\$ 1.02
Eastern* -----	116	80.46	0.69	131.94	1.15
Southeastern -----	97	75.66	0.78	161.89	1.64
Central -----	101	52.48	0.52	80.12	.81
North Central† --	116	51.34	0.44	52.76	.47
West So. Central	82	54.76	0.67	103.29	1.32
Western -----	149	68.83	0.46	97.07	.70

\*Maryland, Virginia, West Virginia, North Carolina, Kentucky, Tennessee.

†Michigan, Wisconsin, Minnesota, North Dakota, South Dakota.

The yield in Preston County was higher and the cost of production lower per acre as shown in the quotation than the average for the Eastern states. These data are not quite comparable because the West Virginia study was made in 1922 and the study by the Department of Agriculture in 1923. The data are not necessarily applicable to Harrison and adjacent counties but they indicate that where there is a good yield and transportation charges are considered, this section of the state can compete very well with the North Central group of states.

Since the study referred to and reported in bulletin 187 of this Station was made, there has been a big improvement in the marketing of potatoes in West Virginia. The West Virginia Potato Growers Cooperative Association has been very successful in the operation of its "Potato Pool" for the past three years, and one of its greatest needs is a bigger volume of business. Farmers should now find no difficulty in marketing their potatoes at the going market price. It is true that before the advent of this association, individual growers could not market their product without undue trouble and often they were not able to find a market at all for their crops. Prices change from time to time. In Charts 1 to 4 and Tables 3 to 6 is presented a comparison of prices between the Clarksburg and Pittsburgh markets; West Virginia potatoes with out-of-state potatoes and farm prices for the United States.\*

Figure 1 and Table 3 show that the prices of potatoes averaged higher at Clarksburg and Fairmont than at Pittsburgh for the months of July, August, and September, 1925. In July and August, whole

\*The paragraphs on prices which are based on a price study during the summer of 1925 were contributed by Dr. Paul A. Eke, Assistant Farm Economist, West Virginia Experiment Station staff.

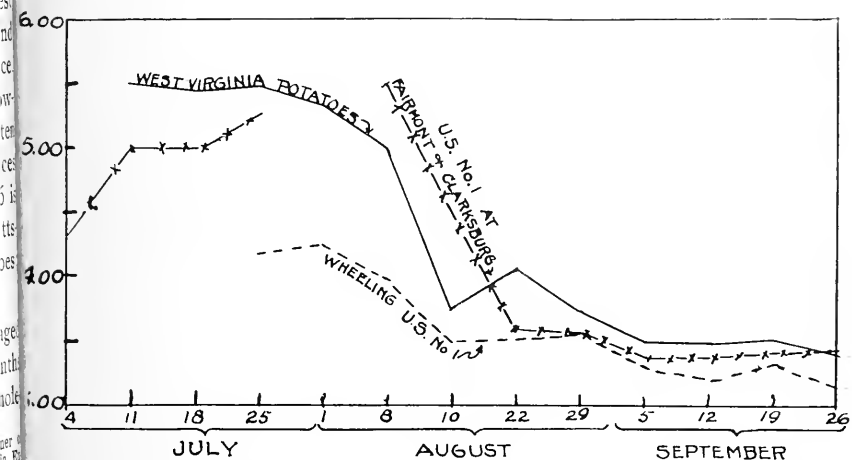
TABLE 3.—Comparison of Average Wholesale Prices Received for West Virginia Potatoes Sold Under "Mountain State Brand" in 150 Pound Bags with Average Wholesale Prices of Potatoes Sold as U. S. No. 1 in 150-Pound Bags at Pittsburgh, Wheeling, and Fairmont and Clarksburg, on Dates Specified from July 4, 1925, to September 26, 1925.\*

Date	Price of "Mountain State Brand" Potatoes**	Price of U. S. No. 1 Potatoes at Pittsburgh	Price of U. S. No. 1 Potatoes at Wheeling	Price of U. S. No. 1. Potatoes at Fairmont and Clarksburg
July 4, 1925		\$5.00		\$4.32
July 11, 1925	\$5.50	5.10		5.00
July 18, 1925	5.45	5.10		5.00
July 25, 1925	5.47	5.30	\$4.20	5.25
Aug. 1, 1925	5.36	5.20	4.25	
Aug. 8, 1925	5.00	5.35	4.00	5.50
Aug. 15, 1925	3.75†	4.20	3.50	4.50
Aug. 22, 1925	4.07	3.95	3.50	3.60
Aug. 29, 1925	3.75	3.70	3.55	3.55
Sept. 5, 1925	3.50	3.30	3.30	3.45
Sept. 12, 1925	3.47	3.20	3.20	3.35
Sept. 19, 1925	3.50	3.20	3.30	3.40
Sept. 26, 1925	3.37	3.25	3.15	3.40

\*Data are from records of wholesalers in the cities specified.

\*\*This data for 43 carloads of "Mountain State Brand" (equivalent to U. S. No. 1) potatoes sold through the West Virginia Farm Bureau.

†One car only.



1.—Comparison of Average Prices Received for Well Graded West Virginia Potatoes in West Virginia Markets and the Wholesale Prices of U. S. No. 1 on the Wheeling and Fairmont and Clarksburg Markets, Weekly, from July 4, 1925 to September 26, 1925. (Adapted from Data in Table 3)

sale prices at Pittsburgh were about 10 cents per 150-pound bag U. S. No. 1, above carlot prices at Clarksburg and Fairmont, but in September, carlot prices at Clarksburg and Fairmont ranged from 10 to 20 cents per 150-pound bag U. S. No. 1 above wholesale prices at Pittsburgh.

The average wholesale prices of potatoes at Pittsburgh included a large proportion of sales of less than carlot quantities. When this is taken into account it is certain that carlot prices were higher at Clarksburg and Fairmont with the exception of a few days, during the three months, July, August, and September. Fairmont, Clarksburg, and Pittsburgh, were better markets than Wheeling for the summer.

The second column shows the average wholesale prices received for 43 carloads of West Virginia potatoes which were graded U. S. No. 1 and put up in 150-pound bags under "Mountain State Brand." Most of these potatoes were sold in West Virginia cities. A few cars were sold in Pittsburgh. It will be noted that for all weeks, except two, higher prices were received for them than were paid for out-of-state commercial potatoes of the same grade at Pittsburgh, Wheeling, and Fairmont and Clarksburg. Premiums were realized on practically all sales made in West Virginia, but the cars which were sold in Pittsburgh, were sold at the same price as out-of-state, U. S. No. 1 potatoes. One must conclude therefore, that the people of West Virginia are willing to pay a premium for potatoes grown in this state even though this is not true on markets outside of the state.

Figure 2 and Table 4 show that grocers at Clarksburg were willing to pay premiums of as high as \$1.00 per 150-pound bag for potatoes grown in West Virginia. These potatoes were put upon the market by a cooperative marketing association, which has enforced uniform grading upon its members. This table points out the reward which consumers are willing to offer for standardized well graded West Virginia potatoes.

Figure 3 and Table 5 show that the average yearly prices per bushel of potatoes paid to growers in West Virginia from 1909 to 1924 have been, with very few exceptions, higher than prices prevailing in three northern winter crop producing states. The same is true when West Virginia is compared with Virginia. Therefore potato producers in West Virginia have been able to obtain a premium over the prices received in these other states.



The premium paid for potatoes in West Virginia over prices paid in Minnesota, and Michigan, have continually increased since the close of the war in 1918. This tendency has been true to a less extent when prices in West Virginia are compared with prices in Maine and Virginia. The reason must undoubtedly be sought in the increased freight charges since the close of the war. Potato growing has become less profitable at long distances from the market and in areas of surplus production, and more profitable near the centers of population and in areas of deficient production. We can conclude therefore that potato growing in West Virginia will continue to obtain the present premium as long as freight charges remain at the present high level, and as long as West Virginia does not produce more than enough to supply the home demand.

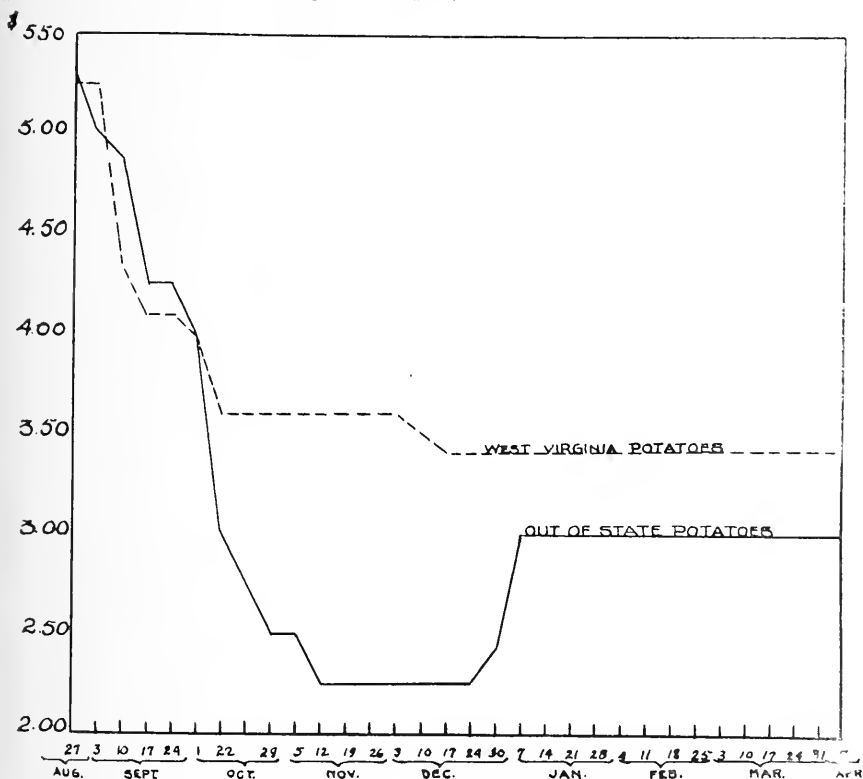


FIG. 2.—Jobber Prices Per 150-pound Bag of U. S. No. 1 Potatoes in Clarksburg Compared with Jobber Prices of Potatoes Grading U. S. No. 1 Bought from West Virginia Potato Growers Cooperative Association on the Same Dates and Markets, Weekly Average August 27, 1923 to April 7, 1924. (Adapted from Data in Table 4).

TABLE 4.—Jobber Prices per 150-pound Bag of U. S. No. 1. Potatoes in Clarksburg, Compared to Jobber Prices of Potatoes Grading U. S. No. 1. Bought From West Virginia Potato Growers Cooperative Association, on the Same Dates and Market, May 21, 1923 to April 14, 1924, Inclusive.\*

Jobber Prices at Clarksburg per 150-pound Bag, U. S. No. 1 Grade					
Date	Out-of-State Potatoes	Co-op. Association Potatoes	Date	Out-of-State Potatoes	Co-op. Association Potatoes
1923			Dec. 10 --	2.25	3.60
May 21 ---	\$2.85	\$3.60	Dec. 24 --	2.25	3.00
May 28 --	2.60	3.60	Dec. 30 --	2.25	3.40
June 4 ---	2.40	3.60	1924		
June 11 --	2.35	3.40	Jan. 7 ---	2.40	3.40
June 18 --	2.35	3.35	Jan. 14 --	3.00	3.40
June 25 --	2.35	3.25	Jan. 21 --	3.00	3.40
Aug. 27 --	5.35	5.25	Jan. 28 --	3.00	3.40
Sept. 4 ---	5.00	5.25	Feb. 4 ---	3.00	3.40
Sept. 10 --	4.85	4.35	Feb. 11 --	3.00	3.40
Sept. 17 --	4.25	4.10	Feb. 18 --	3.00	3.40
Sept. 24 --	4.25	4.10	Feb. 25 --	3.00	3.40
Oct. 1 ---	3.90	4.00	Mar. 3 ---	3.00	3.40
Oct. 22 ---	3.00	3.60	Mar. 10 --	3.00	3.40
Oct. 29 ---	2.75	3.60	Mar. 17 --	3.00	3.40
Nov. 5 ---	2.50	3.60	Mar. 24 --	3.00	3.40
Nov. 12 --	2.50	3.60	Mar. 31 --	3.00	3.40
Nov. 19 --	2.25	3.60	Apr. 7 ---	3.00	3.40
Nov. 26 --	2.25	3.60	Apr. 14 --	3.00	3.40
Dec. 3 ---	2.25	3.60			

\*Data are from West Virginia Potato Growers' Cooperative Association records, and records of Clarksburg jobbers.

Since a bushel of potatoes can be sold in West Virginia at an average of 98 cents, when potato growers obtain from 27 to 35 cents per bushel in Minnesota, and Michigan, it is certain that potatoes can be grown at a profit in West Virginia for the winter as well as the summer market. It does not seem possible that potatoes in West Virginia can average much less than \$1.00 per bushel even on years of great production for the country as a whole.

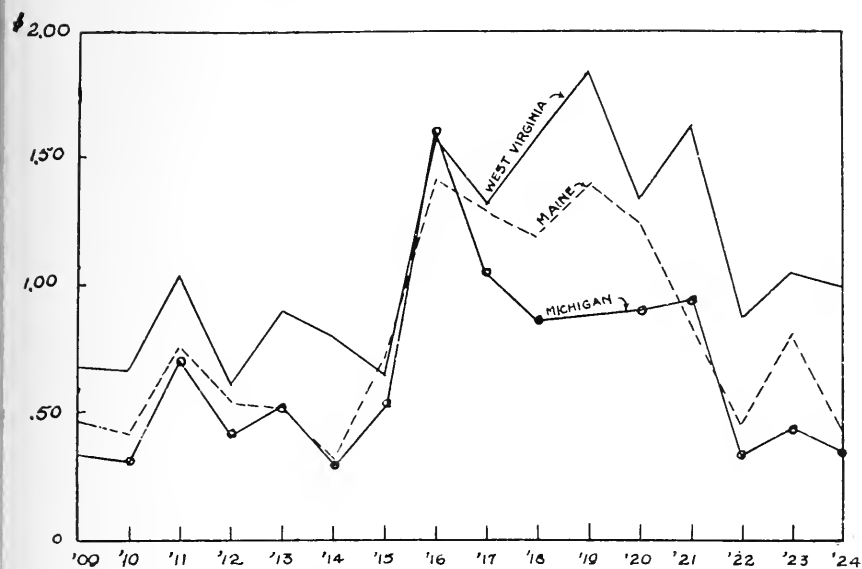


Fig. 3 — Farm Prices of Potatoes in Maine and Michigan Contrasted with Farm Prices in West Virginia, Yearly Average 1909 to 1924, Inclusive. (Adapted from Data in Table 5).

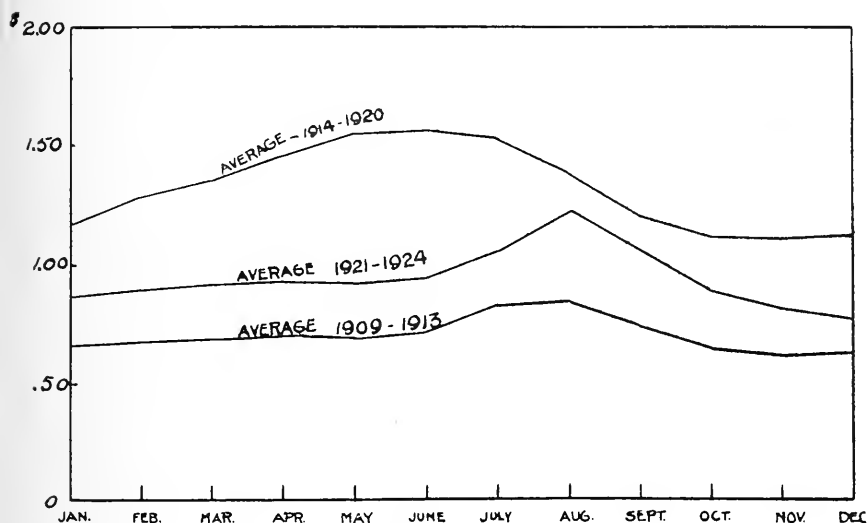


Fig. 4.—Average Farm Price per Bushel of Potatoes on 15th of Each Month, 1909 to 1924, Inclusive, Divided Into Three Periods. (Adapted from Data in Table 6).

TABLE 5.—Farm Prices of Potatoes per Bushel in Certain States Compared with Farm Prices in West Virginia, 1909 to 1924, Inclusive.\*

State	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924
W. Va. --	.68	.67	1.04	.62	.90	.81	.65	1.58	1.32	1.60	1.75	1.35	1.63	.87	1.05	.98
Maine ---	.47	.42	.77	.55	.53	.33	.70	1.42	1.30	1.20	1.40	1.25	.85	.45	.70	.45
W. Va. Premium	.21	.25	.27	.07	.37	.48	-.05	.16	.02	.40	.35	.10	.78	.42	.35	.55
W. Va. --	.68	.67	1.04	.62	.90	.81	.65	1.58	1.32	1.60	1.75	1.35	1.63	.87	1.05	.98
Michigan	.35	.31	.71	.41	.53	.30	.56	1.60	1.05	.89	1.35	.92	.95	.34	.44	.35
W. Va. Premium	.33	.36	.33	.21	.37	.51	.09	-.02	.27	.71	.40	.43	.68	.53	.61	.53
W. Va. --	.68	.67	1.04	.62	.90	.81	.65	1.58	1.32	1.60	1.75	1.35	1.63	.87	1.05	.98
Minn. ----	.35	.64	.58	.28	.52	.32	.39	1.30	.91	.75	1.53	.80	.90	.35	.39	.27
W. Va. Premium	.33	.03	.46	.34	.38	.49	.26	.28	.41	.85	.22	.55	.75	.52	.66	.71
W. Va. --	.68	.67	1.04	.62	.90	.81	.65	1.58	1.32	1.60	1.75	1.35	1.63	.87	1.05	.98
Virginia -	.70	.58	.96	.65	.80	.77	.61	1.37	1.25	1.20	1.57	.98	1.10	.60	1.00	.81
W. Va. Premium	-.02	.09	.08	-.03	.10	.04	.04	.21	.07	.40	.18	.40	.53	.27	.05	.17

\*Data from Year Books of United States Department of Agriculture.

TABLE 6.—Farm Price of Potatoes per Bushel, 15th of Each Month, for United States, 1909 to 1924 Inclusive.\*

Year Beginning July	Price per Bushel in Cents by Months												Weighted Average
	July 15	Aug. 15	Sept. 15	Oct. 15	Nov. 15	Dec. 15	Jan. 15	Feb. 15	Mar. 15	Apr. 15	May 15	June 15	
1909	88.0	78.3	67.9	61.0	56.0	55.0	56.1	55.4	51.0	42.9	37.9	38.8	57.9
1910	52.5	68.9	70.4	61.8	55.7	54.9	54.6	55.2	55.4	59.0	62.9	79.8	61.3
1911	116.2	124.8	101.0	82.3	78.1	82.2	89.4	98.2	109.6	122.2	123.5	111.6	99.6
1912	95.0	75.8	58.0	48.3	48.0	50.6	51.8	52.6	51.2	49.2	51.7	52.5	55.6
1913	59.5	72.2	74.6	71.8	69.2	68.6	69.0	70.2	70.4	70.7	71.4	76.4	70.6
Av. 1909-13	82.2	84.0	74.4	65.0	61.4	62.3	64.2	66.3	67.5	68.8	69.5	71.8	69.0
1914	84.3	81.0	69.8	58.8	50.8	49.2	50.0	50.4	49.1	49.2	50.6	51.4	58.0
1915	54.2	53.4	49.6	54.8	61.2	66.2	79.3	91.2	96.0	96.2	96.8	100.6	70.8
1916	98.8	102.4	110.6	123.8	140.9	146.7	159.8	206.6	237.7	257.2	276.8	261.0	166.3
1917	209.4	155.0	130.6	125.0	125.3	121.9	122.0	121.6	106.4	86.4	77.8	85.2	122.5
1918	118.2	145.2	146.2	135.4	123.2	117.7	115.2	111.9	107.4	112.2	120.2	124.9	125.6
1919	160.6	190.2	175.8	158.5	156.2	169.0	198.1	230.6	269.6	344.6	407.4	403.6	223.8
1920	344.4	243.9	159.8	126.6	116.4	110.0	100.6	89.8	80.9	72.9	67.6	68.5	131.5
Av. 1914-20	152.8	138.7	120.3	111.8	110.6	111.5	117.9	128.9	135.3	145.5	156.7	156.5	128.4
1921	103.4	152.8	153.1	130.6	116.8	109.4	112.0	116.6	115.7	109.0	104.2	103.7	121.3
1922	109.0	101.4	78.8	66.2	60.5	58.8	62.0	64.2	68.6	77.4	79.0	79.8	73.9
1923	102.9	120.8	109.6	91.4	82.5	81.5	86.4	88.1	87.8	91.1	91.3	100.7	94.2
1924	109.0	111.3	81.0	68.8	63.5	64.1	---	---	---	---	---	---	---
Av. 1921-24	106.1	121.6	105.6	89.2	80.8	78.5	86.8	89.6	90.7	92.5	91.5	94.7	96.5

\*Data from Year Book, United States Department of Agriculture, 1924.

The following conclusions may be drawn from Figure 4 and Table 6.

Over a period of years the average price of potatoes for the United States as a whole is the highest in July and August.

Only in years of large production are prices often lower during the late winter and spring months than during the fall months.

In case good yields may be obtained in West Virginia for early digging in July and August, it is advisable to grow potatoes, for the July and August markets. Table 6 shows further that profitable, although somewhat lower, prices may be obtained in West Virginia during the fall and winter.

### Cabbage

The freight receipts of cabbage in Clarksburg totaled 1,390,862 pounds for the twelve months period included in the study. Of this total, West Virginia supplied 2,382 pounds, which went on the market during the month of October. A wholesaler received a shipment of 1,490 pounds of this West Virginia cabbage, and the remainder was made up of small shipments billed direct to consumers. In Table 7 the receipts of cabbage by months are presented.

**TABLE 7.—Total Freight Receipts of Cabbage in Clarksburg by Months, and Receipts from West Virginia, June 1924 to May 1925, Inclusive.**

Months	Total Number of Pounds Received	Pounds Received From West Virginia
1924		
June -----	166,555	none
July -----	161,700	none
August -----	30,500	none
September -----	24,490	none
October -----	263,272	2,382
November -----	157,100	none
December -----	52,800	none
1925		
January -----	102,340	none
February -----	108,765	none
March -----	149,105	none
April -----	102,075	none
May -----	72,160	none
Total -----	1,390,862	2,382

From Table 7 it may be seen that there is a market for cabbage every month in the year. The month of August shows the smallest receipts, and it is during this month that considerable local cabbage

is marketed direct to consumers. In June and July receipts were greater, and in October when late cabbage was ready for market, there were the largest receipts of the year.

The following competing states supplied cabbage on the Clarksburg market, during the months specified:

June: Mississippi, Alabama, Virginia, and Tennessee.

July: Ohio and Virginia.

August: Ohio.

September: Wisconsin.

October: West Virginia and New York.

From the survey of the Harrison County farms it is estimated that 283,297 pounds of cabbage were sold from Harrison County farms between June 1924 and May 1925. This is an indication that the crop can be produced in the county. The demands of the market fully warrant an increase in production, if farmers find that it can be produced economically.

### Onions

There were 1,325,993 pounds of onions placed on the Clarksburg market by freight shipments, none of which were brought in from West Virginia. A few, however, were grown and marketed locally. Most of these grown locally were marketed in bunches as green onions. The quantity of such is very small and the production is limited to a few farmers who are specializing in market gardening. It would be a doubtful undertaking to attempt to grow large quantities of onions in competition with some of the more favorable sections, such as on the muck soils of Ohio and in sections of New York. However, where there are small patches of fertile land on which onions may be grown successfully, this crop would undoubtedly be profitable, for there is no lack of market for them in Clarksburg.

Onions came from other states as follows, during the months specified:

June: California.

July: Kentucky, New York, Virginia, and Washington.

August: New York and Ohio.

September: New York, Ohio, and Indiana.

October: New York and Ohio.

**TABLE 8.—Freight Receipts of Onions in Clarksburg, by Months, June 1924 to May 1925, Inclusive.**

Months 1924	Number of Pounds Received	Months 1925	Number of Pounds Received
June -----	30,240	January -----	75,000
July -----	181,185	February -----	192,425
August -----	71,550	March -----	none
September -----	174,447	April -----	63,336
October -----	231,425	May -----	123,760
November -----	73,700		
December -----	108,925		
		Total -----	1,325,993

### Tomatoes

In Table 9 is presented the freight receipts of tomatoes in Clarksburg.

**TABLE 9.—Freight Receipts of Tomatoes in Clarksburg, by Months, June 1924 to May 1925, Inclusive.**

Months	Number of Pounds Received
1924	
June -----	150,320
July -----	146,316
August -----	24,245
1925	
May -----	71,400
Total -----	392,281

From Table 9 it may be seen that Clarksburg receives 392,281 pounds of tomatoes by freight. Local tomatoes came on the market in the latter part of July and August, and supplied the market until early fall almost entirely.

The local market is reasonably well supplied by local production of tomatoes after the season is well under way. There are often gluts on the market in the midst of the local harvest season, when town gardens come into bearing and the surplus from farm gardens comes on the market. There is not much opportunity for increasing the production of tomatoes with profit during the period when the local product normally comes onto the Clarksburg market. If income from tomatoes is to be increased it seems that changes would have to take place along lines of earlier ripening, better quality, more





Greenhouse in the Clarksburg Area Where Vegetables Are Grown for Out-of-Season Supply.

economical production, and better marketing, including grading and packing. There is no indication that the section of country around Clarksburg is adapted to the commercial growing of tomatoes beyond supply for the local markets, and it appears as though this local demand is very well supplied during the normal season of local production. There is a splendid opportunity for the production of tomatoes under glass during winter, since fuel, one of the large items of expense, is comparatively cheap.

Tomatoes were received in Clarksburg from Florida, Mississippi, Tennessee, Maryland, and Ohio.

### Strawberries

The freight receipts of strawberries on the Clarksburg market are presented in Table 10. There were no receipts by freight other than during the months shown in the table.

TABLE 10.—Freight Receipts of Strawberries in Clarksburg by Months, June 1924 to May 1925, Inclusive.

Months and Years	Number of Crates Received
June, 1924 -----	2,193
May, 1925 -----	1,040
Total -----	3,233

From Table 10 it may be noted that 3,233 crates of strawberries were delivered on the Clarksburg market by freight. These berries came from Kentucky and Tennessee. It is likely that many additional strawberries came onto the market by express.

### Miscellaneous Vegetables

A large part of the vegetables which came into Clarksburg were shipped in cars billed as "mixed vegetables." It was, therefore, impossible to ascertain the quantity of each of the various kinds of vegetables received. A great part of these vegetables came from the Pittsburgh and Cincinnati markets. In Table 11, the quantity of vegetables received in "mixed cars" is presented.

TABLE 11.—Freight Receipts of Vegetables in Mixed Cars, in Clarksburg, by Months, June 1924 to May 1925, Inclusive.

Months 1924	Number of Pounds Received	Months 1925	Number of Pounds Received
June -----	90,729	January -----	114,050
July -----	110,340	February -----	117,875
August -----	1,270	March -----	235,830
September -----	116,540	April -----	338,465
October -----	120,885	May -----	310,999
November -----	195,901		
December -----	104,385		
		Total -----	1,857,269

From Table 11 it may be observed that during only one month in the year, August, did local production come anyways nearly supplying the demand for vegetables. Even then small shipments came in from the Pittsburgh market. During August local production is at its height and not infrequently is there a glut on the market. The glut is caused for the most part by the surplus vegetables produced by farmers who do not make a business of vegetable growing and who made no plans as to the time when the product should come onto the market. The product is a surplus which they have from their home gardens and truck patches. At about this time the gardens of the suburban dwellers and some miners come into use.



Lettuce Is in Great Demand the Year Around. With Cheap Fuel Available There Appears to be Excellent Opportunities for Growing Lettuce Under Glass to Supply Local Markets.

There is often a glut in the market for green beans, tomatoes, and corn at this season of the year. At times there is a glut in the lettuce market, but this is due to the fact that there is not nearly enough produced locally to supply the demand and the wholesaler must order by the car load to supply his customers. At times this leaves the local producer without a very good market. This situation can be remedied only by increasing local production sufficiently to make it unnecessary for the wholesaler to buy from outside for a short period. This might be helped by all the lettuce growers offering their product on the market at the same time and notifying wholesalers in advance of the time when it is ready.

Aside from August the lowest receipts for the year were in June when 90, 729 pounds of vegetables were received. There is a heavy demand for vegetables all through the winter months. There are a few men around Clarksburg who have seen the opportunity in growing vegetables. While market conditions have not always been satisfactory it has been chiefly due to poorly planned production and a "cut throat" system of marketing. There seems an

especially good opportunity for many farmers whose farms are adapted to such to produce vegetable and truck crops for the Clarksburg market.



There Is a Large Demand for Celery, Which Has Been Grown with Success on a Small Scale in the Clarksburg Area.

Too often when vegetable growing is mentioned, the farmer thinks only of beans, tomatoes, potatoes, and corn. But there are many vegetables which are just as much in demand and bring higher returns. There is a woeful shortage of winter salads, such as spinach and kale, on the Clarksburg market. There is always a good market for asparagus, celery, peppers, egg plant, cucumbers, and the root crops. Vegetable growers would do well to turn their attention to the production of some of the above mentioned crops.

### Apples

Table 12 shows the receipts of apples by freight on the Clarksburg market for the period studied.

**TABLE 12.—Freight Receipts of Apples in Clarksburg by Months, June 1924 to May 1925, Inclusive.**

Months 1924	Number of Pounds Received	Months 1925	Number of Pounds Received
June -----	163,208	January -----	436,970
July -----	22,540	February -----	267,000
August -----	53,445	March -----	168,560
September -----	150,537	April -----	250,040
October -----	310,013	May -----	60,030
November -----	631,837		
December -----	246,308		
		Total -----	2,760,488

From Table 12 it may be seen that the total receipts of apples by freight were 2,760,488 pounds or 46,000 bushels. The low months in receipts were May, July, and August. The estimate from the farm survey indicates that 29,000 bushels of apples were sold from Harrison County farms. There are a few commercial orchards in the county and a great many small farm orchards. It is doubtful if there is room for profitable expansion in the orchard industry of the county, but a few good commercial orchardists should find a good demand for their crop.

Some apples are shipped to Clarksburg from the orcharding section of the Eastern Panhandle, but the large majority of them come from other states. Excessive freight rates make it difficult to market West Virginia apples in the state.

### Packing House Products

Table 13 shows the quantity of packing house products received on the Clarksburg market during the period studied.

The receipts of meats and packing house products as shown in Table 13, totalled 11,164,598 pounds. It was impossible to separate this total into the various meats and packing house products from information given on freight records, and records of the dealers were also inadequate for such information. This total includes fresh and cured meats, lard, sausage, etc. The bulk of the packing house products came from Chicago and Minneapolis. There is some local slaughtering but this takes care of a very small part of the trade.

**TABLE 13.—Freight Receipts in pounds of Meat and Packing House Products by Months, June 1924 to May 1925, Inclusive.**

Months 1924	Number of Pounds Received	Months 1925	Number of Pounds Received
June -----	914,053	January -----	1,026,245
July -----	1,132,846	February -----	1,074,335
August -----	1,034,236	March -----	746,135
September -----	938,344	April -----	909,268
October -----	837,831	May -----	881,328
November -----	911,755		
December -----	758,222		
		Total -----	11,164,598

Cattle and lambs are the only farm products grown in the county which are shipped out of the state in any quantity. There are not enough hogs produced to supply the local demand. Records from the various shipping points of the county show that there were 417 car loads of livestock shipped from the county during the twelve months period included in the study. This includes cattle, lambs and a very few hogs.

**TABLE 14.—Livestock Shipped Out of Harrison County in 1924.**

Shipping Point	Number of Cars Shipped
Bridgeport -----	140
Wolf Summit -----	10
Wilsonburg -----	12
Lost Creek -----	125
Salem -----	109
Dola -----	21
Total -----	417

It seems like a big loss in transportation to ship out the local cattle and ship in dressed meat from Chicago, and Minneapolis, but it appears as though the large packing houses, even at a great distance from consumer markets are able to save enough in overhead costs and in by-product utilization so that small local packing plants cannot compete successfully with them. A local packing plant, if it slaughtered only the small quantity produced locally, would most likely meet with poor financial success.

The people of West Virginia are eating very little of the good

quality meat that is being produced on their bluegrass pastures, because the most of it goes onto the eastern markets, while western meat, a great part of it dairy stock, comes onto the local market.

Harrison County is naturally a livestock county, but if land values continue to rise in proportion to wages for farm labor more farmers will find it profitable to turn their attention to dairying and other intensive types of farming. There is much land in the county, however, which can be utilized to best advantage only as pasture for some kind of livestock, whether it be beef cattle, dairy cattle, or sheep.

### Poultry and Eggs

The poultry and egg situation in the Clarksburg market is one that is very difficult to analyze. Some poultry and eggs are received in the cars billed as packing house products. Others come in by express and parcel-post. The available records indicate that Clarksburg received about 46,000 pounds of poultry from other counties in West Virginia, and about 15,000 pounds from other states. On the other hand, records from shipping points in the county show that approximately 25,000 pounds of poultry were shipped from the county going mostly to eastern markets. Records from the farm survey show that approximately 143,000 pounds of poultry were sold from the county, the major part of this going to the Clarksburg market. In so far as the poultry situation is concerned it appears that there is about a balance between production and consumption when Harrison and nearby counties are considered. A large increase in the poultry industry will mean looking for markets outside of the county.

TABLE 15.—Poultry Shipped From Harrison County, 1924.

Shipping Point	Number of Pounds Shipped
Bridgeport .....	2,450
Lost Creek .....	2,500
Salem .....	16,800
Dola .....	1,680
Total .....	23,430

The estimate from the farm records shows the sale of about 650,000 dozens of eggs from the county. Records from the shipping

points in the county show the shipment of 8,700 dozens of eggs, which is probably less than the parcel-post and express receipts from outside the state. This indicates that there is not a surplus production of eggs in the county.

**TABLE 16.—Eggs Shipped from Harrison County, 1924.**

Shipping Point	Number of Dozens Shipped
Bridgeport -----	1,500
Lost Creek -----	3,600
Salem -----	2,160
Dola -----	1,440
Total -----	8,700

### Dairying

The dairy industry has reached the point in Harrison County where it just about supplies the demand of the city for fluid milk. During the twelve months period included in the study, Harrison County supplied 95 per cent of the fluid milk consumed in the city. The producers distributed 4,000,000 pounds and the milk distributing plant 2,120,000 pounds, making a total of 6,120,000 pounds. This does not include the milk from a few one-and two-cow dairies in the city, but these would not materially increase the total. Of the total number of pounds consumed only 156,600 pounds or 2.5 per cent came from outside of West Virginia. On the basis of the above data the daily per capita consumption of fluid milk in Clarksburg was about .6 of a pint. Approximately 4,500 gallons of 20 per cent cream were brought into the city from outside the state for the manufacture of ice cream in the drug stores and in one small ice cream plant. The largest ice cream plant in the city failed to supply records of the quantity of cream which it used. All of it, however, came from outside of Harrison County, and the greater part of it from outside of the state.

Milk retailed in the city at from 14 to 18 cents per quart. There was not a uniform price on the milk routes operated by the dairy-men. The milk distributing plant in the city paid for milk on the butter fat basis. For January, February, March and up to April 26, 1924, the price was \$3.95 per hundred pounds for 4 per cent milk and 5 cents additional for each .1 per cent butter fat above this test.



or the remainder of April, May, and June the price was \$2.80; for July, August, September, and October, \$3.00; and for November and December \$4.00 for 4 per cent milk plus 5 cents for each additional per cent butter fat.

A total of 2,308,000 pounds of condensed milk and milk powder was received by freight on the Clarksburg market during the period studied.

For an expansion of the dairy industry in Harrison County there are three lines of action: First, total consumption of milk may be increased; second, milk may be produced for manufacturing purposes, that is, ice cream, butter, and cheese; or, third, the consumption of condensed milk may be replaced by fluid milk.

Consumption may possibly be increased by an advertising campaign and the present price maintained, but a decrease in price might increase consumption much faster.

The present high price for fluid milk is due to the fact that so much of it is produced in roadside dairies where all feed is bought. Dairy farmers growing a part of their feed could probably produce milk at a cost which would justify them in selling it at manufacturing prices, but markets for such would need to be developed. At any rate, the fluid milk market in Harrison County is fast nearing the point of saturation.

The major portion of the milk from outside the state came onto the Clarksburg market in January, February, March, and April. An increase in local production of from 10 to 15 per cent could be absorbed during these four months.

### Concentrated Feeds and Hay

In Table 17 are presented the receipts of hay and concentrated feeds on the Clarksburg market. Corn, oats, and mixed feeds; that is, poultry and dairy feeds, were included under this classification.

From Table 17 it may be seen that more than 43,000,000 pounds of concentrates and 10,000,000 pounds of hay were received during the twelve months period, while the estimate from the farm surveys shows the sale of 621,000 pounds of hay and 50,000 pounds of corn. An increase in the acreage of corn and oats would probably not be advisable. Much of the land is too steep for economical cultivation and the land that lies well enough for cropping may better be utilized

in other crops. There might well be a reduction in the corn acreage except for ensilage. The freight charges on grain are small in comparison with its value, and other sections of the country can produce grain crops to a much better advantage than Harrison County.

**TABLE 17.—Freight Receipts of Hay, Grain, and Grain Products at Clarksburg, by months, June 1924 to May 1925, inclusive.**

Months	Pounds of Hay Received	Pounds of Grain and Grain Products Received
1924		
June -----	616,914	1,792,877
July -----	363,035	2,702,701
August -----	209,100	4,135,205
September -----	767,041	4,219,881
October -----	1,171,302	3,910,123
November -----	1,320,616	4,100,652
December -----	1,177,230	4,013,563
1925		
January -----	987,544	3,142,318
February -----	1,229,891	4,591,772
March -----	1,049,285	4,110,076
April -----	788,187	3,749,635
May -----	342,893	2,726,922
Total -----	10,023,038	43,195,725

There is a different situation when it comes to hay. The freight charges are high in comparison with the unit value of hay. It is common for thickly populated sections to turn to intensive farming and hay production as the population increases and land increases in value. The chief reason for this is that the carrying charges increase so greatly the value of a bulky feed such as hay. Readjustments should include plans for capacity production of hay and ensilage.

### Marketing

There are three wholesalers in Clarksburg who handle the major portion of the produce and vegetables for the city. There are numerous retail groceries and meat markets in the city. In addition to these distributors there are a number of hawkers and farmers who peddle farm products from door to door. The number of such was not ascertained, but there was a considerable number of them operating, especially during the local producing season. There are no

regulations governing the marketing activities of such hucksters and farmers.

There is dissatisfaction on the part of both the farmers and the distributors over the present marketing situation. The farmers claim that the merchants do not give them a fair price when they offer their produce to them. The merchants accuse the farmers of unfair competition in their peddling and of later offering them the poor quality product which they have failed to sell on their peddling routes. There are two sides to the controversy, and it is one that both merchants and farmers must understand before it can be settled to the mutual advantage of all parties concerned.

There are a number of farmers who are specializing in growing vegetables and truck for sale in Clarksburg. There are a number of others who have a surplus of such products as beans, tomatoes, and eggs, which they market in the midst of the season. No one of these farmers produces any considerable quantity of the products, in fact, as has been shown earlier in this report, they do not altogether produce nearly enough to supply the market. Furthermore, there is no uniformity of production from one season to the next. Some few of the farmers have regular customers whom they attempt to supply with certain commodities, and make several trips a week in delivering. There are few men, however, who have such regular routes, the majority of them having to depend on peddling, perhaps over the same route, but not to regular customers, and without fixed days or time on which to do this peddling.

The common custom is for farmer A to drive to town with a load of produce. He will leave his load and go to a grocery store and ascertain the prices which the grocer is charging for commodities which he has to sell. He then goes out through the town from house to house in an attempt to sell his produce, and asking practically the same price as the grocer. If he has a good day, he may sell all his produce, but often he crosses routes with other farmers and by the middle of the afternoon may be left with a considerable part of it unsold. His next move is to go to the grocer and offer his remaining produce for sale. It has by this time been picked over, and in many cases was in none too good shape at the start. The grocer realizes that the farmer is "stuck" with his produce; and may offer him a very low price for it. The grocer may resent the fact that the farmer has been to his customers. There is often

bitterness on the part of both and so long as this practice continues neither party may expect due consideration from the other.

There is a question as to whether either the consumer, the farmer, or the merchant gains anything from such a system. The consumer pays the farmer near the retail price, he is never certain that the farmer will appear at the proper time; but on the other hand he does get fresh produce and has a right to reject poor quality goods on the spot.

The farmer receives about retail price for some of his produce but if he has anything over, as is often the case, he receives much less than wholesale price for it and it takes him most of the day to dispose of his small load of produce.

The merchant loses sales when the farmers come in his distributing territory. He does not know how to buy because he cannot count on his trade. He may over-buy, taking a loss on hold-over produce, or he may under-buy, losing the opportunity for more sales. He has his overhead expenses going on every day. He is necessary to the consumer for at least ten months of the year. In the end the consumers must pay enough to support the retailer the year round even though they use him only ten months.

The retailers are obliged to keep a supply of vegetables and produce from day to day. Under the present system they cannot look to the farmer to furnish this supply. They, therefore, have to look to the wholesaler. Again the wholesaler cannot depend on the farmer to furnish the necessary commodities. It is his function to buy in car lots, and when a car load comes on the market it is sufficient for a period and during this period the local producer has no market for his small quantity.

The market situation is not at all satisfactory. Production must be increased before there is sufficient business on which to build a cooperative marketing organization. The most practical thing to look forward to seems to be a wholesale market, where the retailers could come and purchase their produce such as was offered by farmers from day to day.





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